THE

AGRICULTURAL

MAGAZINE.

CAMDEN, NEW JERSEY, NOVEMBER, 1825.

Our readers will perceive by the following polite note from Mr. DAVID G. SEIXAS, that a portion of Pyroligneous Acid is deposited with us, for the benefit of such as may wish to make an experiment on its properties in preserving Hams, &c. instead of smoking. We invite such of our subscribers as incline to try it, to call on us and receive a sufficient quantity for a trial of its efficacy. The manner of using it is sufficiently explained in the directions in Mr. Seixas' note, and in an article on the subject in page 54 of the Magazine.

The prices of Aricultural Produce have generally improved since our last—wheat is selling from 95 cents to 1 dollar per bushel; rye, from 50 to 60 cents; corn, from 56 to 64; oats, from 34 to 38; and Barley at $1. Superfine wheat flour is current at five dollars per barrel. Potatoes are scarce, and command a fair price in market. Pork is low, and selling from four to five dollars per cwt. Hams from eight to eleven cents per pound, and lard about the same. Clean flax brings from nine to ten cents per pound, and flax seed from one dollar ten, to one dollar fifteen cents per bushel. Hops are quoted from 26 to 30 cents the pound.

At Pittsburgh, Pa. wheat is stated to be selling at 40 cents per bushel, rye 20 barley 50, corn 25, and butter in kegs from seven to eight cents per pound.

TO THE EDITOR OF THE AGRICULTURAL MAGAZINE.

Deaf and Dumb Asylum near Haddonfield.

Having read in your "Farmers Magazine," the article on Pyroligneous acid, of Mr. Houston, of New York, believing it may be profitably substituted for smoke in curing meat or fish, I send you some for distribution. For expedition, cleanliness and œconomy, it is preferable to the ordinary process of smoking with wood, and for its preservative and palatable properties I think it not inferior.

The meat, after having lain sufficiently in pickle, should be hung up to dry one day; then wet its surface with the acid by means of a brush, spunge or rag, and expose it to the air until the acid be tho-

roughly absorbed. For further particulars your readers are referred to the May number of your Magazine.

Wishing you much success in your laudable design of improving agricultural as well as domestic industry,

I subscribe myself, your friend,

DAVID G. SEIXAS.

November 25th, 1825.

TO THE EDITOR OF THE FARMER'S MAGAZINE.

MANURES.

Mr. Ellis—For me to discover the purport of the following essay, by prefixing the above indication, may appear to some more an hallucination of the moment, than of tending to any radical import or utility. The subject of obtaining manure effectually, and the proper method of applying it to different soils; its judicious management in the barn yard; and discretion in its use in the field, has frequently occupied my thoughts. The remarks of Mr. B. B. Cooper, in your number for October, are unquestionably of great practical importance to the farmer, and in a great measure anticipate what I might otherwise have occasion to notice in my theoretical views and observations. Various interrogatories are accurately answered by the writer, no doubt satisfactorily: and the great desideratum in agriculture experimentally in detail, viz:—the commensurate expense of different manures, and their appropriate application.

The aggregate of these several inquiries:

Lime is found to be the aggregate of those several inquiries, and constitutes the basis of the catalogue. While commenting on the principles inculcated by Mr. C. it will strengthen our future hypothesis, to illustrate the *modus operandi* of lime as a manure.

In the first place its known properties of absorbing oxygen from the atmosphere, and its strong affinity for this impoptant *principle* in the support of both the kingdoms of nature; while it serves essentially to the existence of animal life, proves also a powerful agent in accelerating the fecundity of vegetables and plants, when properly compounded with earthy matters. By this property, therefore, it imparts to the soil a power of retaining a quantity of moisture, necessary for the growth and nourishment of the plants, corn, &c.—it becomes more competent to adjusting the materials for agricultural purposes, from its alkaline caustic nature, which hastens the dissolution and putrefaction of all animal and vegetable matter. Like the alkalies, among which class of medicines the physician seeks out a corrective for acidities, and other incongruous conditions which the human system is at all times liable to; so with calcarious substances, such as lime, marle, &c. they act as neutralisive correctives to the vitiated state of certain soils; and seem to bring about a chemical change, and awaken the susceptibility and fertility of land, for vegetation. Marles are said to be useful in agriculture only in proportion to the calcarious earth they contain. It was

formerly thought essential, that it should contain more than thirty per cent. of lime to be of any value. The generality of farmers pay too little attention to the composition or ultimate benefit which is to accrue from the use of manure, and are therefore very indiscriminate in its application. It is ascertained, for instance, that lime and oyster shells are particularly useful on sandy soils. Sand again, common silicious earth, has been very prolific when applied to low marshy situations. This is certainly an interesting variety and effect, originating out of dissimilar causes. Circumstances so heterogeneous in character, and opposite in their relative co-operations are worthy of consideration. "When we consider," says an admired annotator, "that the many thousand tribes of vegetables are not only all formed from a few simple substances, but that all enjoy the same sun, vegetate in the same medium, and are supplied with the same nutriment, we cannot but be struck with the rich economy of nature, and are almost induced to doubt the evidence of these senses with which the God of nature has furnished us.—That it should be possible so to modify and intermingle a few simple substances, and thereby produce all the variety of form, colour, odour, &c. which is observable in the different families of vegetables, is a phenomenon too astonishing for our comprehension. Nothing short of Omnipotence could have provided such a paradise for man."

Pure lime, however, is the rock on which the farmer is to build his hopes, or indulge his expectations. Its destructive properties to dead animal and vegetable matter, separate or combined with other earths, at once convince us of its supremacy. To ashes may be attributed this property during admixture with common earth, while subservient to the operations of the husbandman. This theoretical analysis, I am happy to discover, agrees manifestly with the practical documents and experience of Mr. Cooper. He remarks, "when manuring with lime, the first cost is incurred, and nearly all is said."

In the purchase of manure, therefore, always bear in mind the great real importance of associating some lime or alkaline properties with what you buy.—Calcareous earths, ashes, which abound in alkaline virtues, and other valuable carbonaceous principles, hold the first rank in the market. By the analysis of soils it has been proved, that of all the substances found in the mixture of earths which constitute a soil, calcareous earth contributes most certainly to its fertilization. The operation of *paring* and burning turf, which is always servicable to land, is doubtless rendered universally advantageous from the carbonaceous matter which is provided by the burning. Carbon is not only an essential component in union with oxygen to render the soil luxurient, by becoming the food of the plant, but it forms nearly the whole of the solid basis of all vegetables, from "the flower of the garden to the oak of the forest."

I have already occupied an unmerited portion of your pages. The economy of manuring, &c. will be a subject for another number.

JOHN A. ELKINTON.

Haddonfield, Oct. 20th, 1825.

FROM THE AMERICAN FARMER.

SUGAR MAPLE.

The people of the United States within the extensive region of country congenial to the growth of the sugar maple, are not aware, probably, of the treasure they possess in that very beautiful and majestic native tree of the American forests. Imperfect as were the returns from only eight of the twenty six districts in which maple sugar was manufactured, in 1810, they show the manufacture of near ly 10,000,000 pounds in that year. The state of Ohio alone manufactures more than 3,000,000 pounds, many families make from 3 to 400 pounds, and were the whole union to produce at the same rate, we should, instead of importing, produce more than double the quantity necessary for the consumption of the United States. The time devoted to the making of maple sugar is when farmers in grain growing regions have little to do, being from the middle of February to the end of March.

A single tree is said to have yielded 5 pounds of sugar in a season —forty trees frequently stand on an acre of land, and it has been calculated that with 34 trees to the acre, 500,000 acres, which is less than some single counties in the United States, would yield a supply for the whole of our consumption, as the population stood in 1810; or a tract of 2,000,000 acres, whereof three fourths might be cleared for the plough, would have then sufficed, or say double that for our present population, making not more than one-seventh of the land of New York or Pennsylvania. In the returns before referred to, we trace the manufacture of maple sugar, from Vermont in the North, to Tennessee in the South, embracing a district of several hundred millions of acres. What would not the genius and power of Napolean have extracted from such rescourses.

CURE FOR A FOUNDER—FROM AN ENGLISH PAPER.

An intelligent farmer has communicated to us, what he says is an effectual remedy against injury to horses and cattle which may have eaten too much grain. It is simply to administer one pint of melted hog's lard, as soon as the fact is discovered. He says he has tried the experiment a number of times, and always with success.

DAIRYING.

Mr. EDITOR—I have been so well pleased with the idea of a dairy, or milk room, the plan of which was recently described to me, that I am induced to make it public.

The shelves are so constructed as to admit the immersion of a milk pan in cold water, nearly to the top, resembling a shallow trough. By the advantage of location, the water is constantly running from a spring, into one end of the shelf and off at the other, and may easily be conducted from shelf to shelf, through a whole room. The consequence is, the milk keeps perfectly sweet in the warm season, until the cream is all risen, which is in a short time—of course

the butter will be sweet. Now is there not hundreds of places that would admit the same improvement with trifling expense, which would be refunded four fold in one season?

And, sir, I will add a line from my own experience in churning. Be sure to put in sufficient of new milk to make your cream very thin, viz. put in equal or even double the quantity of milk you do cream; the consequence is, your butter is brought with less than half the labour, or time, and less liable to be white or striped, as the mess will be all the time thin, move easy, and if it spatter up, it immediately runs down, so that the whole gets equally moved, and all changes at once to butter.

A LOVER OF GOOD BUTTER.

Waterford, Vt. 1825.

CUMBERLAND COUNTY AGRICULTURAL SOCIETY.

The Third Annual Exhibition of the Society was held on Tuesday the 15th and Wednesday the 16th ultimo. in a field belonging to Mr. Ephraim Holmes, in Bridgeton, on the side of which pens were prepared for sheep and hogs—across the middle of the field stalls for the reception of cattle—and, on the opposite side Agricultural machines, and implements of husbandry were exhibited. —The Domestic manufactures were exhibited in a room prepared for the purpose at the Hotel of Jeremiah Buck.

The display of Stock was far superior to that of any former exhibition;—and, from the vast collection of Farmers and citizens from different parts of the county and neighboring counties, who attended to witness the show, we have sufficient evidence of public approbation, which is highly gratifying to the society.

PREMIUMS on stock were awarded to the following persons,

Smith Bowen for the best breeding Mare, with a colt by her side, five dollars. For his Grey Mare, by Florizel.

Dr. Wm. Elmer, for the best bull not more than 4 or less than 1 year old, five dollars. For Durham, an imported 'Improved Durham short horn' bull.

Lemuel Lawrence, for the next best, three dollars. For Shakespear a half bred 'imported Durham short horn' bull, (purchased of Dr. Elmer.)

Dr. Wm. Elmer, for the Calf not less than six or more than twelve months old, three dollars. For the 'Improved Durham short horn' heifer called Fairy.

Dr. Wm. Elmer, for the best heifer not less than one or more than four years old, three dollars. For Dianna, of Holstein and short horn blood.

Smith Bowen, for the best Ram of Dishly blood, two dollars.

Smith Bowen, for the best Ewe of Dishly blood, two dollars.

Daniel L. Burt, for the best Boar, not less than one or more than two years old, three dollars.

Norton Harris, for the best Boar, not less than six or more than twelve months old, two dollars.

Smith Bowen, for the best breeding sow, with not less than six pigs,

nor over six moths old, three dollars. For his sow and seven pigs five months old. In addition to the animals which received premiums, the following were exhibited.

Mr. Norton Harris, six hogs of extraordinary size and fatness, far surpassing any animals of the kind ever exhibited—estimated to weigh, if killed during the winter, between four and five thousand pounds.—Also his young boar of good size and form; *all* of which maintain the highest reputation of his breed, and contribute *largely* to the display of stock.

Mr. John Johnson's sow and stock of piggs, eleven in number, all by his imported English boar, were fine specimens of the breed.

Mr. Nathan Stratton's sow and four pigs, from Mr. Johnson's stock of good size, and in fine condition.

Mr. Samuel Perry's young sow, from Mr. Harris's stock, a good specimen of the breed.

Mr. Smith Bowen's Dishley lamb, six months old, possessing the characteristic marks of the imported stock.

Mr. Josiah Garrison's Ram and Ewe of native breed.

Mr. Joseph Buck's one fourth 'improved Durham short horn' bull Dandy, from whom many of our Farmers have obtained some very fine calves; and whose blood and color may be traced in most of them:—also, his three calves out of native cows, by Dandy.

Mr. James Lummis's bull Roderick, one year and four months old, of Holstein blood, remarkable for his great size, possessing some good points and in fine condition.

Dr. Wm. Elmer's seven cows and four calves of Holstein short horn and 'improved Durham short horn' blood, all of superior size and form, and exhibiting the characteristic marks of the different imported breeds;—which were much admired, and added greatly to the display of neat cattle.

Mr. John Johnston's two yearling heifers (purchased of Dr. Wm. Elmer) one sired by Dandy, the other by the imported bull Bishop; of good size, fine shape, and remarkable points.

Mr. John Holmes's Kate, of Holstein and short horn blood, (purchased of Dr. Elmer) with her calf by her side, sired by the imported bull Durham, which exhibited all the good points of the sire and dam;—also, his young heifer, from Kate, sired by Dandy, of large size.

Gen. Daniel Elmer's Nell, of Holstein blood, (purchased of Dr. Elmer,) with her calf, sired by the imported bull Durham, in fine condition;—also, his cow, of Bakewell stock, remarkable as a milker, for quantity and quality, having given 133 quarts of milk in one week, from which 10 pounds of butter were made;—also, a native cow with a yearling calf, sired by Dandy—all having a remarkably fine appearance.

Mr. Norton Harris's two heifer calves from native cows, sired by Dandy, one of them of extraordinary size, and possessing some good points.

Dr. Ephraim Buck's two heifer calves, one from native stock, shews the effects of keeping—the other, from a native cow, sired by Dandy.

Mr. James Brook's bull calf from a native cow, sired by Dandy.

large and well formed;—also, a heifer calf sired by Shakspear, remarkable for good shape and lightness of offal.

Dr. I. H. Hampton's cows with their calves sired by Dandy, showing the blood of their sire.

Mr. Ephraim M'Gee's native cow with a fine heifer calf, sired by Shakspear.

Mr. J. J. Hann's native cow and calf of good shape and size, also,

Mr. Ephraim Holmes's native cow.

Mr. James Lummis's two breeding mares with their colts.

Mr. James Moore's mare and colt, also,

Mr. Carles Shute's young mule, of remarkable size.

The following persons received Premiums for Crops.

For the greatest quantity of Sweet Potatoes, raised on half and an acre of ground, three dollars—To Peter Ladow, (for ninety-two bushels and three pecks.)

For the greatest quantity of Clover Hay raised on three acres of ground, three dolls.—To Daniel Parvin, (for six tons and a half.)

In consequence of the excessive drought which prevailed during the last season, the crops in this part of the country, were much injured, and in many instances completely destroyed, therefore no certificates were offered for premiums on any other crops.

The premiums for Domestic Manufactures were awarded as folllows:

For the best eighty yards of Linen Diaper, three dolls.—To Mrs. Osborn, of Fairfield.

For the next best—two dolls.—To Mrs. Lydia Moore.

For the best pair of woolen stockings, one dollar—to Mrs. Ruth Bowen.

For the best pair of worsted stockings, one dollar—to Mrs. M'Chesney.

For the next best, seventy-five cents—to Miss Ann P. Clunn.

For the best pair of cotton stockings one dollar—to Mrs. Clarissa Holmes.

For the best Blanket; one dollar—to Mrs. Phebe Holmes.

For the best Bedquilt, one dollar—to Mrs. Charlotte Ireland.

For the best twenty yards of Domestic Carpeting, two dollars—to Mrs. Sarah Harris.

The committee also recommended the following articles for discretionary premiums, which have been awarded.

To Mrs. Wells, of Downe township, for an elegant goose-down Bedspread, tastefully ornamented by painting, two dolls.

To Miss Ruth Riley of Bridgeton, for a neat and handsome Youth's Imitation Leghorn Hat, one dollar.

To Mrs. Harris, (a blind woman) for a pair of knit Stockings, and Vest complete, one dollar.

Besides the articles which received premiums there were exhibited two bedquilts of elegant paterns—a handsome piece of Domestic cloth from the Bridgeton Factory—also a piece from the Cedarville Factory, for which the manufacturers deserve much credit.

A sample of balls of silk, spun by silk-worms, and raised by Mrs Hannah Howell, of Fairfield, excited much curiosity.

The Committee oppointed to adjudge the premiums for ploughing with horses, report, that only two teams entered, Dr. Wm Elmer's and James Lummis'; and that the premium be awarded to Mr. Lummis—also in the ploughing with oxen, only two teams started, Dr. Wm. Elmer's and Mr. Hoff's, and that the premium be awarded to Mr. Hoff. This being the first trial with the plough, much interest was excited. It is hoped that at our next annual meeting, more teams will be in readiness—no plan perhaps can be found more effectual to extend a practical knowledge of ploughing, than the competition excited at ploughing matches.

The agricultural implements exhibited were "Eastman's Patent Cilinderical Chaff Cutter," made under the direction of Mr. Smith Bowen, who has purchased the patent right for this state, Mr. James Lummis' "Hill or drill Cornplanter," a very ingenious and useful machine. As it has not been sufficiently tried, the Society are not yet prepared to recommend it to the attention of farmers.—Mr. Lummis offers the free use of it to any member of the society, who wishes to profit by it. Dr. Wm. Elmer presented for exhibition "Miner's Patent Root Cutter," a Stalk Cutter, Cultivator, Substratum Plough, Improved Harrow, Revolving Horse Rake, and Improved Roller.

The Premiums awarded to Mr. Smith Bowen and Dr. Wm. Elmer were relinquished to the Society.

The Society dined together at the Hotel of Jeremiah Buck, on the last day of the exhibition, after which they proceeded to the election of officers, and then adjourned.

E. H. MOORE, *Secretary.*

November, 21st, 1825.

FROM THE CONNECTICUT MIRROR.

Mr. EDITOR.—I am glad to see that the abominable practice of docking and nicking horses is going out of fashion. I believe it prevails in no country in the world besides England and the United States; we got it from the mother country, and the sooner we leave it off, the better. It is wonderful how any body but an ignorant, narrow-minded blockhead of a jockey should ever have thought of it—it is as offensive to good taste, as it is a violation of every human feeling. Has nature done her work in such a bungling manner, in forming that paragon of animals, the horse, that he requiaes to have a large piece of bone chopped off with an axe to reduce him to symmetry; or that beauty and grace can be obtained only by cutting a pair of his large muscles?

"The docking and nicking of horses," says an intelligent writer on Farriery "is a cruel practice, and ought to be abandoned by the whole race of mankind. Every human being, possessed of a feeling heart and magnanimous mind, must confess, that both the docking and nicking of horses is cruel;—but that creature called man attempts thus to mend the works of his Almighty, wise creator; and doing which, he often spoiles and disfigures them. What is more beautiful than a fine horse with an elegant long tail and flowing mane

waving in the sports of the wind, and exhibiting itself in a perfect state of nature? Besides, our Creator has given them to the horse for defence as well as beauty."

The same author relates an instance of a fine hunting horse, owned by an Englishman, which would carry his rider over the highest five-barred gate with ease; but he thought the horse *did not carry so good a tail* as he wished, he therefore had him nicked, and when the horse got well, he could scarcely carry him over two bars. "Thus," said he, "I have spoiled a fine horse; and no wonder, for it weakened him in his loins." For myself, I would cheerfully give ten per cent. more for a fine horse whose tail had never been mutilated, than for one which had been under the hands of a jockey.

AN EQUESTRIAN.

AGRICULTURAL EXHIBITION.

The Pennsylvania Agricultural Society held their annual meeting on the 19th, 20th and 21st inst. at Prospect Hill, in Philadelphia county.

The exhibition of live stock, the trials of ploughmen and animals at the plough—the competition in sheep shearing—the display of fine Arabian, turf, and draught horses, afforded more variety, and greater excitement than had been on any similar occasion observed.

After having witnessed the success of their efforts, not only in the extent of the exhibition, but in the interest manifested by a vast assemblage of respectable farmers, the society heard from Dr. Darlington, an ingenious and instructive address, and adjourned to the Red Lion, to receive Mr. Sergeant, Mr. Hopkinson, Mr. Walsh, Mr. Ingham, Mr. Brent, of Washington, Mr. Barnetz, of York, the members of the Legislature from the city and county, and other gentlemen whom they had invited, to honor them with their company at dinner.

The Committee on *neat cattle* report, that they consider the following persons entitled to premiums:

John Hare Powel, for the best bull, not less than one year old, a piece of plate worth fifty dollars; for the improved Durham short horn bull Beau. Premium relinquished.

James Cox, for the next best; plate, forty dollars; for the I. D. S. H. Bull Blyth.

George W. Sergeant, for the next best; plate, twenty dollars; for the I. D. S. H. Bull Monk.

John Hare Powel, for a bull calf, not more than one year old; plate, fifteen dollars; for the I D S H Bull Calf, Ohio. Premium relinquished.

John Hare Powel, for the best cow, not more than seven, nor less than three years old; plate, forty dollars; for the I D S H Cow, Lady; premium relinquished.

John Hare Powel, for the next best; plate, twenty-five dollars; for the I D S H Cow, Belina; premium relinquished.

The Committee oppointed to adjudge the premiums for ploughing with horses, report, that only two teams entered, Dr. Wm Elmer's and James Lummis'; and that the premium be awarded to Mr. Lummis—also in the ploughing with oxen, only two teams started, Dr. Wm. Elmer's and Mr. Hoff's, and that the premium be awarded to Mr. Hoff. This being the first trial with the plough, much interest was excited. It is hoped that at our next annual meeting, more teams will be in readiness—no plan perhaps can be found more effectual to extend a practical knowledge of ploughing, than the competition excited at ploughing matches.

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The Committee on *neat cattle* report, that they consider the following persons entitled to premiums:

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James Cox, for the next best; plate, forty dollars; for the I. D. S. H. Bull Blyth.

George W. Sergeant, for the next best; plate, twenty dollars; for the I. D. S. H. Bull Monk.

John Hare Powel, for a bull calf, not more than one year old; plate, fifteen dollars; for the I D S H Bull Calf, Ohio. Premium relinquished.

John Hare Powel, for the best cow, not more than seven, nor less than three years old; plate, forty dollars; for the I D S H Cow, Lady; premium relinquished.

John Hare Powel, for the next best; plate, twenty-five dollars; for the I D S H Cow, Belina; premium relinquished.

James Cox, for the next best; plate ten dollars; for the I D S H Cow, Cora.

John Hare Powel, for the best heifer not more than three nor less than one year old; plate, twenty dollars, for the improved D S H heifer, Lydia; premium relinquished.

John Hare Powel, for the next best; plate, ten dollars, for the I D S H heifer Coquette; premium relinquished.

James Cox, for the next best; plate, five dollars, for the I D S H heifer Rose.

John Hare Powel, for the best heifer not more than twelve months old; plate twenty dollars, for the I D S H heifer Lucy. Premium relinquished.

John Hare Powel, for the next best; plate ten dollars, for the I D S H heifer Margaret. Premium relinquished.

John Hare Powel, for the next best; plate, five dollars, for Mary of Durham short horn and Sussex blood. Premium relinquished.

John Hare Powel, for the best thorough bred improved Durham short horn bull; plate, fifty dollars, for Wye Comet. Premium relinquished.

Joh Hare Powel, for the best thorough bred improved Durham short horn cow, not less than three years old—plate, thirty dollars, for Shepherdess. Premium relinquished.

John Hare Powel, for the best thorough-bred improved Durham short horn heifer,—plate, twenty dollars, for Yorkshire Belle. Premium relinquished.

THOS. SMITH,
THOS. SERRILL,
JAMES COX,
GEO. BLIGHT. } *Committee.*

The foregoing premiums, awarded to John Hare Powel, amounting to two hundred and ninety five dollars, have been relinquished.

The Committee for *Sheep* and *Swine* report that they consider the following persons entitled to premiums:—

William J. Miller, of Philadelphia county, for the best ram, not more than two years old, a piece of plate worth ten dollars; for his imported Saxon ram.

For the next best, five dollars.

For the next best, five dollars.

Charles Kuhn, of Philadelphia county, for the best ram, not less than two years old, a piece of plate worth seven dollars—for a ram from his merino flock.

For the next best, plate, five dollars, for a ram from ditto.

Henry L. Waddell, of Bucks county, for the best pen of merino ewes, not less than five in number, a piece of plate worth ten dollars.

For the best merino ram, plate, ten dollars.

For the best pen of merino ewes, not less than five in number, plate, ten dollars.

John Hare Powel, of Philadelphia county, for the best ram of Dishley blood, not less than two years old, a piece of plate worth ten dollars.

For the best ram of Dishley blood, not more than two years old; plate, seven dollars.

For the best pen of Dishley ewes not less than five in number; plate, ten dollars.

For the best ram of Southdown blood, a piece of plate worth twenty dollars; for his imported ram.

For the best ewe of Southdown blood, plate, twenty dollars; for his imported ewe.

For the best broadtail ram of mountain Tunisian blood, plate, ten dollars.

For the best broad tail ewe of mountain Tunisian blood, plate, ten dollars.

Reuben Haines, for the best boar, not less than eight months old, a piece of plate worth ten dollars.

Charles Kuhn, for the next best, plate, five dollars.

David Woodington, for the best sow, not less than eight months old, five dollars.

John Finlayson, for the next best, three dollars.

For the best pigs, not less than five in number, not more than eight months old, five dollars.

The committee further submit, that although they recommend the above animals, as entitled to premiums, they consider Mr. Leffert's ewes and ram, and Mr. Worth's ewes and ram, Mr. Samuel Cox's ewes and ram, all of Dishley blood, as fine specimens of their breed.

Mr. Case's pen of Dishley ewes was much noticed.

Mr. Wilson and Mr. Wynkoop exhibited pens of merinos, of good size and in fine condition.

Mr. Reading of New Jersey, presented *two very fine* merino sheep.

The committee have the satisfaction to state, that they have on no occasion witnessed a display of finer stock of the kind.

Mr. Rees' boar of eleven months was of remarkable size.

Mr. James Cox's sow of four years, and Mr. Samuel Cox's boar of the same age, of mixed Suffolk breed, are deemed well entitled to notice.

HENRY L. WADDELL,
JOHN WILLCOX,
JONATHAN ROBERTS,
WM. HARRIS,
WM. DARLINGTON,
} *Committee.*

The committee on *Horses* report, that they consider the following persons entiled to premiums :—

Edward Parker, for the best thorough bred horse, not less than three years old, a piece of plate worth fifty dollars, for the horse "John Stantley."

Joseph Kersey, for the best horse, fitted for draught; not less than three years old, a piece of plate worth twenty-five dollars, for Chester county bay.

Wm. Wallace Cook, for the best filly not more than three years old, a piece of plate worth ten dollars; for Rarity.

A premium having been offered for the "best thorough bred horse," which in the general acceptation of the term, in this country is applicable only to the race called *turf horses*, your committee are constrained to regard the strict letter of the premium bill, and thus cannot take into view the beautiful and high bred Arabians, which on this as on former occasions, have commanded admiration wherever they appeared. They are aware that their predecessors have not acted upon this rule, yet they conceive, as there are thorough bred Cleaveland bays, thorough bred barbs, and thorough bred horses of various denominations, there can be no hesitation in the minds of the directors, as to the construction, which they have given to the society's intention formally proclaimed in their bills. No Cleaveland bay having appeared, they venture to recommend that an honorary premium of a cup worth twenty-five dollars, be presented to John G. Watmough; for Abdal'ah,* and that a cup of the same value be presented to John Watson for Brown Highlander, as they conceive that the symmetry; *breeding*, activity and *strength* of these horses, more nearly approach the characteristics of the animal called Cleaveland bay, than any which have been brought into their view.

JOHN HARE POWEL,
RICHARD B. JONES,
JNO. G. WATMOUGH,
REUBEN HAINES,
} *Committee.*

JOHN ALLEN, *assistant judge.*

The Committee for *Oxen at the plough* report that the following named individuals contended for the premium for the best pair of working oxen, viz:

B. Larzalere, of Bucks county, William Harris of Chester county, John G. Watmough and Mordecai R. Moore of Montgomery county, and Thomas F. Ashton of Philadelphia county, and that they consider Dr. William Harris entitled to the premium of "a piece of plate worth fifty dollars for the best pair of working oxen, above six years old, reference being made to their performance at

*Col. Watmough was originally on the committee for horses. He peremptorily refused to serve, but was persuaded to act, upon condition, that no opinion should be required from him in relation to horses for quick draught, in which only his interest could be concerned. A similar course was observed by Judge Jones, who, by his vote upon the question, as to the "thorough bred horse," excluded his own, although as high bred an Arabian as any that can be shown.

the plough;" one eighth of an acre of hard old sward having been accurately ploughed by them, six inches deep, in twenty one minutes, without a driver.

GEORGE BLIGHT,
JOHN WILLCOX,
JAMES WORTH,
JONA. THOMAS, } *Committee.*

The committee for the trial of *Draught horses* beg leave to report, that they recommend the award of the premium for the best pair of draught horses, reference being had to their performance at the plough, to Guy Bryan of Philadelphia county, a piece of plate worth twenty five dollars. Nine persons having entered.

JOHN WILLCOX,
WM. HARRIS,
THOS. SMITH,
JONA. THOMAS, } *Committee.*

The committee for the trial of *Ploughmen with Oxen* beg leave to report, that they recommend the award of the premium for the best ploughman with oxen, to Thomas F. Ashton, of Philadelphia county—thirty dollars. Six persons having entered.

JOHN WILLCOX,
THOS. SMITH,
JONA. THOMAS,
GEO. BLIGHT, } *Committee.*

The committee for the trial of *Ploughmen with horses*, beg leave to report that they recommend the award of the premium for the best ploughman with horses, to Samuel Beaver of Chester county—twenty dollars. Nine persons having entered.

JOHN WILLCOX,
WM. HARRIS,
THOS. SMITH,
JONA. THOMAS, } *Committee.*

The committee on *Sheep shearing* consider David Tappan entitled to a premium of five dollars. Five persons having entered.

MATHEW ROBERTS, *chairman.*

The foregoing reports having been presented to the Directors were unanimously accepted, and the rewards were accordingly proclaimed.

JOHN P. MILNOR, *Recording secretary.*

In addition to the animals which were entitled to premiums: the Directors noticed with great satisfaction an hundred and ten horned cattle of various breeds, some of them exhibiting by their points, symetry and early maturity, great improvement, evidently arising from the increased attention which has been within a few years excited towards this important object of the husbandman's care. They were much attracted by Mr. Blight's, Mr. Morris' and Mr. Hamilton's cattle from Philadelphia county.

To Mr. Wynkoop, Mr. Feaster, Mr. Worth, Mr. Hart, Mr. Paxon, Mr. Waddell, and Mr. Thomas, of Bucks county, Dr. Har-

ris and Mr. Davis of Chester county ; Mr. Roberts, and Mr. Matthew Roberts, of Montgomery county, the Society were indebted for important additions to their show.

Besides the sheep for which premiums could be awarded by the terms of the bill, more than two hundred were presented, many of them characterised not merely by excellence of fleece, but by fine forms and every mark of healthful and vigorous constitutions. This remark is particularly applicable to Mr. Kuhn's merino flock, which by careful selection and skillful management, have been brought to attain a degree of *size and symetry* in carcass, rarely exhibited by merino sheep, in this or in any other country.

Although the display of stud horses quite equalled the expectations which the Directors had formed—the deficiences in form, bone, size, and action, which are evident in most of the females, lead them to apprehend that without increased attention to the selection of brood mares, no permanent improvement can be expected in their offspring, however excellent the sires may be in every point and characteristic to be desired.

Thus whilst they consider themselves much indebted to the gentlemen who have gratified them by sending mares to the ground, they conceive themselves bound to adhere to the restriction announced in the bills, and therefore have caused the premium for brood mares, as none appeared "worthy of distinction," to be withheld.

By offering a premium for thorough bred horses, it was not intended to promote the introduction of animals for the turf, but merely to put within the reach of Pennsylvania farmers the kind of horse which a majority of the Society consider best adapted to improve the races employed for quick draught upon the road.

JOHN HARE POWEL.

Corresponding Sec'ry Penn. Agricultural Society.

Philadelphia County Oct. 27, 1825.

FROM THE CONNECTICUT COURANT.

PYROLIGNEOUS ACID.

The writer professes to have had some acquaintance with this article, both with regard to its manufacture and its use. It will not, however, be so much his object to satisfy the chemical inquirer, as to state such facts concerning it as are of a practical nature.

If a piece of cold iron be held for a few moments in a steam of smoke, it becomes covered with moisture. It is common for the New England Farmer to bring in his axe in a cold winter's morning, *to take the frost out*, as he terms it. He holds it directly in the blaze and smoke of his fire, and in a short time it becomes covered with small drops of a brown liquid. This liquid, instead of coming out of the axe, as he may perhaps suppose, is nothing less than the impure *pyroligneous acid.* I say *impure,* because it is mixed with tar, gum, charcoal, &c. and it is owing to these impurities that it has a brown color. Smoke consists in part, of pyroligneous acid, in a state of vapour, and this liquid is collected upon the axe for the

simple reason that the axe is cool enough to condense it. So fast as successive portions of smoke come in contact with the axe, this part is deposited until the axe becomes too warm to condense it.

Here then we have a simple illustration of the whole theory of smoking meat. We place a ham in a smoke house and build a fire under it, and continue this several days, *in order that we may get some of this moisture to settle on the ham and penetrate it.* We get at the same time, the gummy, tarry matter, which gives the sooty color, and the unpleasant taste to the outside of a ham. It must be obvious to every one, that the same effect would be produced on the meat, by simply bathing it over with the impure acid. But there is a way in which these impurities are all removed from the acid, and it is rendered almost colorless as water; retaining at the same time its smoky taste, and its antiseptic property. In the opinion of many, the flavor of hams prepared with the *purified* acid is superior to that given in the common mode of smoking. To say the least it is fully equal.

The acid may be used in the manner here mentioned, by bathing the meat with it, or it may be mixed with the pickle which is put to the meat. In either case the quantity of acid wanted will be about the same—one quart to 150 or 200 pounds of meat, according to the different tastes of different persons.

When the mode of *bathing* is adopted, the acid should be applied after the meat has been suitably salted, and it will be necessary to allow a few hours between each bathing for the acid to penetrate. The bathing may be performed by means of a brush, a bit of rag, or by immersing the meat in the acid. In this last mentioned mode, if a piece be suffered to remain a very short time in the acid, (longer or shorter according to its size) the whole operation may be performed at once. When different bathings are applied, a ham of twenty pounds may require wetting three or four times. It is immaterial whether this be done before the ham becomes dried or afterwards, and it can at any time be repeated. When the acid is applied in this mode, it *penetrates* the meat in the same manner, and for the same reason, that it penetrates it *when applied in the common process of smoking.*

When the mode by putting it in the pickle is preferred, it will be necessary that the meat should remain in that situation three or four weeks, after which I consider it best that it should be taken out and hung up in some convenient place to dry. This drying can be effected without any trouble, and I think it best for two reasons.—One is, that when dried, it cooks more naturally than when filled with moisture. The other is, that is not to be expected that a large ham can be long preserved in a weak brine.

With regard to the preservation of meat through the summer, I consider it safest to suppose that hams, &c. prepared with the acid will require the same attention as those smoked in the common way. I have, however, kept hams the summer past, with very little trouble in the open air, in a chamber, by bathing them over two or three times with the acid.

The antiseptic quality of this substance is remarkable. On

the eighth of April last, I took a thick piece of veal fresh from a hind quarter, weighing two pounds; I immersed it in the purified acid for five minutes; after which I enclosed it in a net, and hung it up in a back room, exposed as much as might be to flies. It has never exhibited any signs of putrefaction, and it is now perfectly fresh and sweet. It indicates to the smell and taste, that it is very strongly impregnated with smoke.

The application of this acid to any kind of meat is proper in all cases where smoke is required.

BLEACHING OF FLAX AND HEMP.

If ripe flax is examined, it will be found to be composed of fibres or filaments united together by the sap, enveloping a semi-ligneous substance, and covered by a thin bark. It is the fibrous part only that is used for making cloth, and it must therefore be previously separated from the other matters.

The sap, or succulent part, is composed of extractive principle and water, and the first process is to separate this substance, which holds the filaments together. As soon as the flax is pulled, it is steeped in soft water until the putrefactive fermentation takes place. This degree of fermentation begins with the succulent part, as being more susceptible of decomposition than the rest. Was the flax to be continued long in this state the whole substance of it would be decomposed or destroyed: upon the same principle that malt is injured by too long steeping, or that wort loses its substance by too long a fermentation. It must therefore be taken out of the water while yet green, and before the whole of its sap is separated. Well water, and brackish water, must be carefully avoided, as well as that which flows over a gypseous soil. Such waters accelerate putrefaction, and hurt the quality of the hemp and flax.

The flax when taken from the water, is spread out upon the grass to dry. During the fermentation and decomposition which thence result, there is a speedy combination of oxygen and carbon. Exposure on the grass facilitates the escape of the carbonic acid into the atmosphere, and the plants become of a whitish grey colour.

It is known that a ley, very slightly alkaline, may be substituted with advantage, for this long and noxious operation; it is therefore certain, that a chamber from twenty to thirty feet in length, into which the steam of alkaline caustic water, (of the strength of one fourth of a degree only,) is introduced, will be sufficient to produce the same effect as watering on an immense quantity of hemp and flax, suspended on basket work; and that, too, in less time, and with less expense, than are required from the different manipulations of watering. The losses occasioned by the negligence of workmen, who, by suffering the hemp and flax to macerate too long, give time to the decomposition to reach the filaments, which renders them brittle, and occasions a considerable waste, will also be avoided. In this process, the artists can follow every moment the progress of his operation, and stop it at the favourable period.

Nothing now remains but the wood, and the flax or fibrous part.

The wood is a hollow tube covered over very compactly with the flax.

To separate the wood it must be kiln dried, in order to render it frangible or brittle; but care must be taken not to apply too much heat, for fear of injuring the flax.

It is next to be beaten or broken, by which means the flax is not only divided into small fibres, but most of the wood is separated, and the part which adheres is reduced to small fragments. To separate these again, the flax is to be threshed, in small parcels at a time, either by manuel labor, or mills contrived for the purpose. Hackling is the last process; which is drawing or combing the flax in small parcels at a time, through a pile or group of polished and sharp iron spikes, placed firmly in wood through an iron plate.

The linen as it comes from the loom is charged with what is called *the weaver's dressing*, which is a paste of flour boiled in water; and as this is brushed into the yarn of the warp before it is woven, it is somewhat difficult to separate it when dry. To discharge this paste, the linen must be steeped in water for about forty-eight hours, when this extraneous substance undergoes a kind of fermentation; this does not extend to the substance of the linen itself, upon the same principle that the green sap is disengaged from the flax without injury to its texture.

When the linen is well washed after this last process, it contains nothing that water can separate; it is of a greyish-white color, although the fibres of which it is composed, when divested of every adventitious substance, are naturally very white.

The matter which thus colors the linen, is of a resinous nature, insoluble in water, and from its intimate union or dissemination through the very fibres of the flax, is difficult of separation, even by those substances which have a solvent power over it.

To disengage it, however, in as cheap and expeditious a manner as possible, without injuring the texture of the fabric, is the sole object of the process of bleaching.

FROM THE DARTMOUTH (N. H.) HERALD.

KEEPING HORSES.

Every gentleman, who is obliged by his health or his business to keep a horse, complains of the enormous expense incurred by it. If allowed to eat and waste as much as he chooses, a horse will consume from four to five tons of hay in a year, besides the necessary grain. But it is asserted, from actual experiment, that ten pounds of good hay, with two quarts of corn a day, are enough to keep a common horse in fine order. Ten pounds of hay a day are 3650 pounds, little more than a ton and half, a year—and two quarts of corn per day, are about thirty three bushels a year. Call hay seven dollars a ton, and corn four shillings a bushel, and you make the annual expense of feeding a horse twenty six or seven dollars, about half as much as it commonly costs.

To keep a horse in the cheapest manner, let him stand on green

turf, dug up pretty thick, and placed on the floor of his stable—let him be carefully and faithfully curried every day. This is of more importance than is sometimes imagined. It opens the pores, and preserves a healthful state of the skin, on which, in horses, as in men, depends as much as on almost any thing else, the proper and healthy operation of the various animal functions.

Although the inferior animals are not, like men, subject to unnatural stimulants received into the stomach, they unquestionably often consume more food than is necessary to maintain their vigour and spirit. This surplus it is economy to ascertain and retrench.

Corn is cheaper than oats for horses, because there is more heart in a quantity of the same price. It is better to be given two or three times a day in small messes—and to be given dry, that the mastication of it may keep the mouth in a healthy state.

To measure hay, the tare of a basket may be taken, and the hay given from it in small quanties through the day, but chiefly at night.

A horse that is not used, should be fed with corn sparingly. It should be occasionally salted.

It is not perhaps generally considered, that horses are subject to colds and fevers, as really as men. They should therefore be used with great tenderness and delicacy, and often washed in cold water. The pulse generally indicates the health of a horse. It may be felt about an inch back of the eye, and in health beats about 35 strokes a minute.

The great secret in making horses look well and do well, is attention to them. Men who are above looking to their horses, will seldom ride good ones.

In using horses, it is better to drive briskly and stop often, than to drive even slowly by long stages.

FROM THE NEW YORK NATIONAL ADVOCATE.

OPIUM.

This is an article of general use and of great value, and every effort has been made to encourage its manufacture in England. The London Society of Arts has awarded a premium of thirty guineas to two persons, for preparing 143 lbs. of opium, from English poppies; and the success of the experiment warrants the conclusion, that if the article can be manufactured in a climate so moist and cool, we certainly have degrees of latitude in this country promising greater success. The article of opium, which is prepared in vast quantities in India, forms a profitable item in the commercial exports of that country. The *papaver album*, or white poppy, is cultivated in great abundance over the east, and grows in every section and variety of climate, excepting on the ridges and summits of mountains. A rich strong soil is required, and the plants should be well attended, and watered daily. The process of making the opium is simple:—After the flowering is finished, and the capsules have attained full size, an incision is made in them at sunset, for three or four evenings; the milky juice, when

suffered to run into vessels, soon concretes, and forms into cakes of a tough brown substance. This is opium. Chemists inform us, that it is a very compound substance, containing sulphat of lime, sulphat of potash, an oil, a resinous body, an extractive matter, gluten, mucilage, &c.

There are many plants in this country possessing narcotic qualities, but we doubt whether there are any from which the opium can be extracted of a quality equal to that from the poppy. The *atropa belladona*, or deadly nightshade, is a remarkably narcotic plant; the *degitalio purpurea*, or fox glove; henbane, hemlock, stramonium, &c. &c. are equally narcotic; but the medicinal value of the opium may be safely calculated upon from the poppy only.

Good Turkey opium is eight dollars per pound; and when we take into consideration the vast sums of money expended for that article, and for laudanum, it would justify an attempt to manufacture opium, by endeavouring to raise the poppy in several states in the union.

The dry heat of India, and the strong soil necessary for the poppy, may be found in Alabama, and some other states to the south and west.—We think the plant would thrive in Maryland and Virginia: at all events, we suggest the propriety of making the experiment in gardens and hot houses, and if the plant can be cultivated to any extent, it will be a great source of profit.

FROM THE EVANGELICAL WITNESS.

SILK WORMS,

Recommended as very profitable in the United States.

About five years ago, Wm. Gallespie, Esq. of the town of Montgommery, Orange county, (New York) sowed seeds for a nursery of white mulberry [*morus alba,*] for the purpose of the culture of the silk worm. The ground occupied by the nursery is about four square rods. This small lot yielded last summer, 175 skeins of sewing silk, rivalling in softness, strength and beauty, the best imported specimens of the same article. These skeins, with a sufficient quantity of tow for a pair of stockings, would command in market ten dollars. The whole labour expended in the culture, Mr. Gillespie estimated at two dollars—making the produce of four square rods eight dollars.—One acre cultivated in the same way would yield three hundred and twenty dollars, besides the expense of the labour.

Farmers might clothe their wives and daughters in silks of good quality, at less expense than it now requires to clothe them in fine cotton. It is estimated that five thousand dollars worth of sewing silk is sold annually in Orange county alone, and the whole sales of the article in the state of New York may probably be estimated at one hundred and fifty thousand dollars.—All this would be saved to our country by the extension of this very profitable branch of husbandry, so as to supply the home consumption. Much of the labour too, can be performed by small children, who would otherwise be idle, and thus early habits of industry would be created.

The whole process is simple, and a knowledge of it easily acquired. After the middle of May, the egg of the silk worm is brought from the bureau, and exposed to the warmth of the air, but not to the rays of the sun. Early in June, the term of incubation expires, and the small worms make their appearance. They are now to be fed with mulberry leaves with which they are supplied twice a day; the leaves to be scattered in the enclosure where they are kept. In about six weeks they attain their full growth, when they are of a beautiful golden colour. A small quantity of leaves supplies them for the first few weeks; the sixth week they require an abundant supply. Mr. Gillespie informs us, that during this week, when a stranger visits their apartment, they leave off eating, raise their horns, and give plain indications that they know him to be a stranger.

After feeding about six weeks they quit eating and are prepared to commence spinning. Oak or walnut leaves, dried in the sun, so as to be curled, are now thrown into their enclosure: they lodge in the folds of the leaf and begin to spin from their own bowels—first the tow by which they attach their web to the leaf, then the thread, which they form into a solid web, so as to shut themselves closely within.

The larvæ, or worms enclosed in the balls, that are intended for propagation, cut their way out of the silky cell, and escape from their own prison, in the form of a butterfly, with beautiful variegated wings.—White paper is placed under them, on which the egg is deposited. One butterfly will deposit two thousand eggs. These papers with the eggs, are laid away in a chest or desk, until the following spring, when the process described above is again repeated.—"Oh Lord, how manifold are thy works! in wisdom hast thou made them all, the earth is full of thy riches."

After this interesting insect has furnished the fine material, the tow is picked off the balls, which are thrown into hot water, and a stick is passed among them, to which the ends of the threads attach themselves.—For sewing silk, forty of them are laid together and reeled. The thread, thus composed of forty fibres, is twisted hard on a large spinning-wheel, then doubled and twisted again, and wrought into skeins.—The whole process of manufacture is completed by scouring in the same manner as wollen yarn, to detach the glutinous substance, which the worm employs in the fabrication of its thread.

It must be remarked that the black mulberry, [*morus nigra,*] a native of the United States, will not answer so well. The silk manufactured from this leaf is said to be of a very inferior quality.

Mr. Gillespie had a premium of eight dollars awarded him at the anniversary of the agricultural society of Orange county, 1822.

The legislature of New York has offered a premium for the planting of white mulberry trees.

Specimens of the ball, the tow, and the sewing silk, have been deposited with the editor of the Evangelical Witness, who will take pleasure, in showing them to any of his friends who may have the curiosity to examine them.

FROM THE NEW HAMPSHIRE PATRIOT.

WOOL.

The following remarks from the American Farmer, on the cultivation of this staple of increasing importance, are worth the attention of our agriculturalists:

We have had frequent occasion to observe, how vague is the judgement of the generality of farmers as to the quality of wool, arising naturally, from the want of experience, and the habit of minute observation. We allude to the middle and southern states, where there are few neighbouring manufactories, of great power and capital to create demand, and to beget brisk and sharp-sighted competition amongst buyers and sellers. But the case is altering, and with it we may expect corresponding improvement, in the care and management of this valuable animal. But how can we speak of care where there is total neglect? Of management, where there is not a show of system?

The relation of two incidents that occurred under our personal notice, will convince the reader how liable are inexperienced persons to be misled, in regard to the quality of their wool; and how essential is the difference, as it effects the *price*, in cases where an unpractised touch, can discern none at all. Not long since a most respectable farmer called on the Editor, to say that he had received an application for some of his Merino sheep, and inquired what he ought to ask for them. Why that, my friend, with that race of sheep, depends chiefly, of course, on the *fineness* of the wool.—Oh! said the farmer, they are real Merino, from imported stock, and kept unmixed. Editor—I am sure that is your persuasion, but I know too well how sheep are managed with us, not to apprehend that your very fine wool, may not pass so well under the nice touch and accurate eye of the manufacturer. I think if you can get ten dollars per head for yours, you will do very well, unless they have been treated very differently from the mass of the imported flocks, sold fifteen years since in this market. Oh! said the farmer, I think that's too little—my sheep are pure Merino. He was then invited into the office of the American Farmer, to show him what *really fine wool was.*—We handed him a sample from the back of one of the Saxon bucks, (which are no other than merino, maintained with care in their greatest purity,) sold last year at Boston, and the property of H. Watson, Jr. of East Windsor, Connecticut. Our friend, the farmer, looked at it and felt it once and again, and then observed —I believe ten dollars will do, I'll take the ten—good morning, sir. Some weeks after, another farmer of less experience, came to ask the same question. Very nearly the same dialogue ensued. He produced some of his *very fine wool*, we pulled out Mr. Watson's, and folding them in separate papers, sent them to Mr. Sykes, who has brought the manufacture of wool to great perfection in our own vicinity. The farmer's "very fine Merino" was marked F, the Saxon, D, and without any further explanation, we desired his opinion as to their comparative value. His answer follows:

"Upon the supposition that the wool D and F, were in the same condition as to cleanliness, we should consider D worth from 80 to 100 per cent. more than F."

Thus, suppose A, to have a flock of 100 Saxon or best Merino—and B, to have 100 of what are *supposed* to be genuine, each flock costs the same for *keep*—whilst A, gets double as much money for the fleece of his flock when sent into the market.

FROM THE AMERICAN FARMER.

AMERICAN VINEYARDS—PRODUCE OF MR. ADLUM'S.

An account of the capital employed and the produce of my vineyard, for the year 1823.

To 13 cwt. 3 qrs. sugar, at 11 dolls. - - -	$151 25
Brandy cost - - - - - - - - - -	28 00
To 20 barrels, at 50 cents, - - - - - -	10 00
To 5 Madeira pipes, to rack wine in, - - - - -	10 00
To 18 gross of wine bottles, at 10 dollars, - - -	180 00
Corks cost - - - - - - - - - -	16 25
To sundries for fining, wax, rosin, &c. say, - - -	10 00
Say one yesr's interest on the above capital employed, which I think a fair charge on $405 50, - -	24 33
	$429 83

Produce of the Vineyard principally sold this year, 1824, *in Wine and Cuttings.*

By cuttings of the vine sold for - - - - -	$304 50
——Wine sold to the first of this month, November, mostly in bottles, at from 5 to 6 dollars per dozen, the greater part at 6 dollars, and some was sold by the gallon—total sold, - - - -	806 65
——Have on hand 30 1-2 dozen bottled, at 6 dollars,	183 00
——Wine ready to bottle, at least 36 dozen, at $6	216 00
——Have on hand, which will be ready to bottle between this and Christmas, 130 gallons at least, at $1 50 per gallon, - - - - - -	195 00
——Used in the family and presents, at least to the value of - - - - - - - - -	100 00
Total produce, - - - - - - - -	$1805 15
Total cost, - - - - - - - - -	429 83
Total profit, exclusive of labour, - - - -	$1375 32

With less expense of labour and trouble than the same space of tobacco ground, and it is less trouble to prepare the wine and have it ready for sale than tobacco is; and the labour on an acre of vines is not of more value than that of attending three acres of corn—the expense of the stakes to tie the vines to, *excepted*—and where the planter of a vineyard has land of his own, he will not have to lay out any money for them.

Observations, &c.—This wine from the produce of two acres of land; the produce (in grapes) was upwards of three hundred bushels, and upwards of eight hundred gallons of wine. The cuttings of

the grape vines sold, came off of about four acres, two of which had not yet borne fruit. The wine alone came to $1072 82, which is upwards of five hundred dollars profit to the acre—And my opinion is, that after the vines come fairly into bearing (which is generally the fourth year after the cuttings are planted,) the average crop, say for seven years, will be about five hundred gallons of wine to the acre;—but if the vines are well attended to, there will be a good many grapes on the third year after they are planted.

This year, 1824, was the worst year for grapes I ever knew, and others whom I have consulted, and who have attended to grape vines for upwards of twenty years, are of the same opinion. But such an occasional missing of a crop I think an advantage to the country, as it shows and demonstrates to the planter of vines those that will stand all the vicisitudes of climate, &c. This year, my Tokay or Catawba, Bland, Madeira, and all the foreign kinds of varieties, perished; while the Schuylkill, Musaatel, Constantia, or Cape of Good Hope Grape, and Worthington, bore a fair crop; so that from this circumstance, I would recommend to every person who may plant vines, to have a moiety of these kinds, as I believe they will never fail to produce a fair crop, for such a year as this may not happen again in twenty years. I have attended to grapes ever since the year 1798, and never knew so many to perish, which I attribute to the cold and wet weather in the last week in May, and the first week in June, which caused the blossoms to drop off, without the fruit ever forming or swelling, except the three varieties above mentioned; and where there was a few late blossoms came after the first dropt off, the clusters and grapes were both imperfect, and the berries generally cracked and dried up.

For the time to come, I will sell the cuttings of vines, where the various kinds of wine grapes are taken, at the following prices: any quantity between twenty and one hundred cuttings, four cents each; from one to five hundred three and a half cents each; from five hundred and upwards, three cents each; and the Isabella, including all my foreign kinds, one dollar the dozen cuttings. Where any person writes for but one kind of wine grapes, if under one hundred, five cents will be charged, and four cents each if upwards of one hundred are ordered.

JOHN ADLUM.

Georgetown, D. C. Nov. 11th, 1824.

P. S.—I am of opinion that, as our wines grow older, no sugar will be necessary, except in very wet seasons. But, as we are all quite young in the business, it will take some years to ascertain the fact. J. A.

MANAGEMENT OF CALVES.

Observations on the rearing, fattening, and proper management of calves, as practised by the best breeders in England, extracted from Dr. Reese' New Encyclopedia.

Where it is customary to rear calves with skim milk, it should

always be boiled, and suffered to stand until it cools to the temperature of that first given by the cow, or in a trifling degree more warm, and in that state be given to the calf. Milk is frequently given to calves when warm only; but that method does not succeed so well as boiling it. If the milk be given over cold it will cause the calf to purge. When this is the case, put two or three spoons full of runnet in the milk and it will stop the looseness. If on the contrary, the calf is bound, bacon broth is a very good and safe thing to put into the milk.

Whatever hours are chosen or set apart for feeding a calf, it is best to adhere to the particular times, as regularity is of more consequence than is generally supposed. If the calf goes but an hour or two beyond the usual time of feeding it will find itself uneasy and pine for food.

Calf pen.—In most instances it is the custom to have the calf pens annexed to the cow house. This is the plan, however, in general, not to be recommended, as every person who has had any experience among cows must know how naturally and how forcibly a cow expresses her attachment to her calf; with what care and anxiety, if permitted, she licks it all over, and uses every exertion to protect it from injury; how the tender calf clings to its affectionate mother, as if sensible that to her alone it can trust for protection; and yet the poor helpless creature, perhaps is dragged away and placed within its mother's view, or at least within her hearing, as if on purpose to augment the pain of her sufferings. Its doleful cries keep alive the pangs of the unhappy cow; she struggles to break the chain that binds her fast, and seems restless and uneasy whenever approached. In such a state of agitation it is impossible she can feel well, or give that quantity or quality of milk she would otherwise furnish.

To lie dry and warm is of the greatest consequence in the rearing of calves. The principal thing to be observed in the construction of calf pens, is the laying of the floor, which should be made of laths or spars about two inches broad, laid at the distance of an inch from each other on joists, so as to make the floor about one or two feet from the ground, as the situation will admit. This not only keeps them quite dry, by allowing all the moisture to pass immediately away, but has the advantage of admitting fresh air below the bedding, and thereby preventing that unwholesome, disagreeable smell so often found among calves; for it is to be understood this place below the floor should frequently be cleaned, as well as the floor itself, whenever it becomes wet or dirty; but it is not right to allow the litter to increase to a great thickness, or otherwise the moisture will not pass through. Calf pens are however, often made without this sparred floor, and the fresh litter laid on the old, which is a slovenly practice, and not by any means to be recommended. So essential are warmth and good living to young animals of every denomination, that the care which has been taken of them in their early days, will be manifest in every stage of their future growth. Nor is there any stock which will pay better for this cautious management in their youth than the cow kind; for if they are stinted in their feed or carelessly attended whilst in their

growing state, they will never arrive to that size which they would otherwise do, and consequently the loss will be perpetually felt by the farmer who attempts to raise milk kine of his own breed without giving them a due attendance in the first year.

FROM MEMOIRS OF THE PHILADELPHIA AGRICULTURAL SOCIETY.

ON LIME AND MARLS.

(By Mr. John Lang.)

Read April 14, 1812.

SIR,

The inquiries which have lately been set on foot in our society, concerning the different varieties of lime, have created a considerable degree of interest, but perhaps not more than the subject deserves. Were the question clearly decided, whether lime is possessed of any nutritious quality, or if it only acts as a stimulant, by dissolving such animal and vegetable substances as lie inert in the soil, and thereby preparing them for the food of plants, it would go a great way towards removing any difficulties which may stand in the way of such conclusions as we may find it necessary to draw from our farther investigations upon lime, or rather calcarious substances. Besides, we might be thereby enabled to account for the various theories which have been adopted, by practical and scientific enquiries, upon these subjects. You have declared yourself freely in favour of the last position, and have done me the honour to take me into the list with yourself.

Dr. Tennent in his remarks upon the recent improvements in Scots husbandry, thus observes, "It is the property of calcarious "substances to act very powerfully in dissolving such vegetable "and animal substances as are deprived of life. Under the action "of lime, vegetable matter in particular is speedily dissolved; but, "if it be either used in excess, or if the land be too severely cropped, "without allowing a necessary restorative of putrescent manure, "every one knows that the soil is soon exhausted, and rendered "incapable of supporting any kind of vegetation." Here, in my opinion, the terms *calcarious substances* are too general and vague; for, though some calcarious substances are known to be powerful solvents, others perhaps possess nothing of that quality at all, or at least in a very inferior degree. We know that from 25 to 50 or 60 bushels of our best lime is a sufficient dressing for an acre of land; according to the poverty or richness of the soil, at the time it is applied; whereas Dr. Anderson says he has had experience of lime in all proportions; from one hundred, to seven hundred bushels to the acre, upon a great variety of soils; and has always found that its effects in promoting the fertility of the soil, have been in proportion to the quantity employed, other circumstances being alike.

From these, and other cases which might be enumerated, would it not be a natural conclusion to suppose that our strong lime acts by its solvent quality, in dissolving or decomposing such soluble substances as they meet with in the soil? We find, when too great

a quantity is applied, especially if the land is poor, instead of benefitting, it is often hurtful to the crop; but when applied in proper proportions, and with a judicious rotation of crops, it is a most valuable manure; whereas Dr. Anderson's lime, of which too great a quantity could not be employed, must have possessed very little, if any, solvent quality, and its fertilizing powers must arise from a nutritious principle. And this agrees with the account of the mild lime, which my friend, John Mills, of Chester county, put upon part of a field which I saw. He said its effects were similar to dung, giving out its strength to the first crop, but that they were soon exhausted. Perhaps if he had put on two or three hundred bushels to the acre, instead of sixty, they might have lasted longer, for though the lime he used is considered of very little value, it may possibly be considerably stronger than that of which Dr. Anderson put seven hundred bushels. But if our farmers in Pennsylvania, had no other lime except such as would require three hundred bushels per acre, I presume very little would be used for manure, for this plain reason, that they could buy as much land for the money, as the lime would cost.

Dr. Anderson sets it down as a fixed principle, "that there is "only one kind of calcarious matter; and that all the varieties of "calcarious substances we meet with, are entirely occasioned by a di- "versity in the nature of the extraneous bodies with which the calcari- "ous matters are united, or a difference in the form it may appear in at "the time." If this is the case, the enquiry should be, whether the most pure and unmixed calcarious substances, or those which we find in combination with other matters, are the most valuable, either as a cement or for manure. The most pure calcarious substances which we know, are chalk, pulverized shell, and the most pure shell marl. For a cement it is well known, that these three varieties are of little or no value; and as a manure they require a great quantity to produce any effect. The most pure shell marl, which will be found to contain less extraneous matter than any stone lime, requires at least forty loads to an acre, and, sometimes, from one hundred to three hundred loads are put on. But if the most pure calcarious substances are the most valuable manures, how much more pure must gypsum be, of which one or two bushels to an acre, produces such an effect? And how much purer must we suppose the limes, which require no more than from twenty-five to fifty or sixty bushels to an acre? But the contrary has been shown to be the fact. It is also a fact, that those limes, of which a great quantity is required for manure, when used in building admit of a very small proportion of sand; and that of a fine soft grit. Of this class is the lime made from chalk, and all the lime stone of the Bahamas, the West India islands, and the south west coast of this continent, which I am told consists of immense rocks formed of shells, in some instances very little changed from their original state: whereas our strong lime in Pennsylvania requires a great proportion of sand, of a sharp grit, and makes a very strong cement.

I am inclined to think, with Dr. Anderson, that there is only one kind of calcarious matter; and with Dr. Darwin, that it has all originally been an animal production; that though the putrescent particles

with which it had been formerly combined, have long been dissipated, it may still retain gases, which, when disengaged, are nutritive to plants; that pure calcarious matters have little or nothing of a solvent quality; and that gypsum and lime derive their respective properties and additional value from the combination of calcarious matter with mineral acids, and other extraneous substances. Hence I conceive, that if the pure calcarious matter contained in gypsum (which is said to be 33 per cent.) were separated it might make a very good manure, at the rate of three hundred bushels, more or less, to an acre. All the English writers on this subject consi ler the different varieties of lime and gypsum valuable in proportion to the quantity of calcarious matter which they respectively contain; and that this class of manures has most effect upon soils which contain the least calcarious matter, previous to their application: upon this principle, how will they account for the effects produced by one or two bushels of gypsum to an acre, not only upon lands which never have been limed, but also upon limed land, a fact confirmed beyond a doubt, by the universal experience of our farmers? It is true, indeed, that marl is less valuable, in proportion to the quantity of extraneous substances which is mixed with it; but in this case, the calcarious matter has not entered into a chemical combination with the extraneous particles; but, though mixed, are still distinct; and these generally consist of clay, sand, or peat-moss, which are in their nature more inert than the calcarious matter.

Dr. Anderson gives the best account of the natural history of the shell marl, that I have any where met with; but it appears to me, that he has never had the opportunity of using it; because his account of its effects upon the soil will only apply to what he calls clay marl; which is nothing more or less than mixing different soils. But the use of what is called clay marls and stone marls, are now almost universally laid aside; the expense of hauling being found, in most cases, to exceed the profit derived from them. It would seem that the circumstance of the dressing of Du Hamel's marble chimney-piece, has become the groundwork of Dr. Anderson's, or more properly the English, theory, concerning calcarious substances, which has been caried to such a length as to lose sight of the practical experience of farmers. But had Du Hamel been along with me, I could have shown him many instances of a remarkable effect produced upon natural as well as sown grasses, by the small dust, from the dressing with the hammer of the hard whyn-stone, of which many stone dykes, or fences, are built in Scotland. This has been often observed by many besides myself, and could not be attributed to calcarious matter. Whether sulphuric acid was the active principle I shall not pretend to say; but the whyn-stones, when broken, emit a strong sulphuric smell. For my own part, I pronounce nothing positive, my motive is to bring every theory to the test of experiment. If these hints have any effect in calling forth further investigation, my object is obtained.

I am, sir, with great respect, yours, &c.

JOHN LANG.

RICHARD PETERS, ESQ.

ON THE HAWS, OR HOOKS (SO CALLED) IN HORSES.

[*By Richard Peters, Esquire.*]

Read June 8, 1813.

Belmont, June 2, 1813.

DEAR SIR,

During the last winter, I had in my service, what is too common,—a conceited driver of my carriage, who believed himself exclusively acquainted with the management of the affairs of the stable. He wished me to *clothe* my horses, and had a foppery on this subject, whereof there are too frequent exambles. I would not indulge this unnecessary and highly injurious propensity.—Clothing horses subject to sudden and frequent exposure to cold and wet, I have known through my life (and I have owned horses almost half a century) to be dangerous to their health; and a preventive to, or destroyer, of the hardihood and strength, which that animal by nature possesses. On those its usefulness mainly depend. Were I compelled to the alternative, I would prefer an open shed, in which horses should be sheltered from bleak winds and rain, to a close stable. Much less would I choose, in any situation to clothe them, when in health. But servants who wish to pare labour, will have horses wrapped in blankets, and kept in close stables. They add high feeding, (which is still more prejudicial,) to give them a sleek coat, and save themselves the trouble of rubbing and cleanliness. As my servant could not carry his point in one way; he determined on a course he considered equivalent.—He stopped every crevice in the stable, through which air could be admitted; and fed unsparingly, contrary to my frequent injunctions. The consequences were, that several of my horses were seized with violent fevers. These appeared with the usual symptoms, and particularly in morbid affections of the eyes. The youngest horse was the most affected. On this account, horses of three to seven years old, are always in the most danger, as diseases of the eyes, in such horses, most frequently occur. It is not uncommon for young horses, especially if pampered, to be afflicted with early blindness. The loss of one eye is frequent; and in this case, that remaining is, generally, the stronger for the privation. Both eyes, however, often are lost. Pampering and *over working* young horses should be carefully avoided. My servant knew, as he believed, *effectual remedies*. "My horses had the *hooks*," as the *haws* are vulgarly denominated.—"These must be *cut* out of the eyes." But, before I was acquainted with the subject, in my early life, I had a capital young horse, sacrificed to this mistaken and ruinous operation. Ignorant quacks do not know, that the horse has a membrane, peculiar to this animal; which is at pleasure, drawn over the eye, by means of a muscle with which he can draw the eye into the socket. The enlargement of this, by a fever, produces the appearance, which, in the jockey slang, is called the *Hooks*. Reduce the fever, by depleting remedies, such as bleeding plentifully, purging, &c. and the *hooks* disappear;—i. e. the membrane is restored to its natural size and office; which is, to clear the eye from

insects, dust, and other pests inserting themselves, or accidentally entering, this organ. I need not mention, that I would not permit the cutting out this useful membrane.

Two of my horses had swellings of the bars, or roof of the mouth, called *lampas*. Young horses are the most subject to it. It is occasioned by fever; and the horse should be treated accordingly. Sometimes a mess or two of hard corn (Indian) banishes this protuberance. *Burning* is usually practiced. It is not so ruinous as *cutting* for the *haws;* but I never suffer it to be done; having known horses irretrievably injured, by repetitions of this operation.

My horses were recovered from their fevers; but I believe two of them will never be totally relieved from the consequences. The complaints in the eyes frequently recur; and I fear will occasion blindness in one, or both of them. I blame myself, in some degree, for unusual remissness in frequent visits to my stables. Such negligence every owner of horses should cautiously avoid. True, we cannot controul or command servants in this country; in which the *Saturnalia* are celebrated every day in the year. Among the ancients, the servants were satisfied with one annual, but short, term of equality. The exemplary qualities of our ever lamented General WASHINGTON, shewed themselves in every department of his private as well as public, life He was an early riser, and he commenced every day with a visit to his stables; in which he minutely examined and directed every necessary arrangement; and no person of his day knew better how to treat the horse; both in his support and the various uses to which the services of this noble animal can be applied. It is to be earnestly desired, that his example in this, as well as greater concerns, were more generally followed.

Proofs of the capacity of horses to bear the inclemencies of seasons; and their hardihood in a state of nature, are before us constantly. The danger of high feeding and pampering, we experience every day. Yet both are overlooked.

I have lately received an account of some wild horses, on an island opposite Accomack in Virginia; which though on a smaller scale than I had been informed it was, serves, among a thousand other proofs, to show the inexpediency of *over care* in regard to this invaluable animal. I by no means wish to encourage inattention, or cruelty; not only because I abominate both; but because it would be a work of supererogation, as it respects too many proprietors of horses, or those they employ.—I send to you the letters containing the information I sought on this subject; with a wish to promulgate any important facts relating to it.

After the free use of the fleam, and the drugs of the shops, I began to despair of the recovery of my horses. But I put them on a diet, which most rapidly operated. I fed them, exclusively, on raw *potatoes*. The inflamation in the eyes subsided entirely; and the whole system recovered its usual functions, by this cooling, laxative, and detergent regimen. Precedent remedies, no doubt, were highly useful. Yours, very truly,

RICHARD PETERS.

DR. JAMES MEASE, *Secr'y of the Philad. Agric. soc.*

FROM THE SAME.

ON BREEDING IN AND IN.

[*By Richard Peters, Esq.*]

Read July 14, 1823.

Belmont, June 29, 1815.

DEAR SIR—I perceive in Mr. Ecroyd's communication, page 52 "3d, breeding in and in;" there is a striking coincidence of his experience with mine. You know that I very much despise accumulating facts, merely for the purpose of supporting an opinion. But truth requires individual facts, *pro and con*, to form just conclusions.

Mr. E. remarks "that (by breeding in and in) a constant dete-"rioration has taken place; the bone becomes smaller, and perhaps "for the second and third generation, the shape rather handsomer, "but a continual diminution of size takes place; perhaps, however, "the greatest defect is a want of increase, arising both from barren-"ness of the ewes, and the lambs being so weak and sickly, as to "die in great numbers." I can truly say that this, in most particulars, is exactly my experience. The last proofs I have had, were exhibited by my *Tunis sheep*. The original pair continued vigorous, and the ewe prolific, to a late period of their lives. But their lineal descendants of the full blood, though handsome, were small; and mere runts in size, after four or five descendants. They reminded me of a Polish dwarf I saw in London; who was a Lilliputian figure of a very handsome man. He said he was a nobleman of unmixed blood, through many descents Whatever was the fact, he seemed to be so; i. e. bred in and in.—I was compelled to sell off (last year) all the diminutives of my flock; at the price of small common sheep. In human subjects, such would be called manikins. Yet they preserved their figure; and superiority of mutton. The lambs were not apparently sickly; but they would die suddenly. Holders of Merino flocks can lamentably attest similar facts, in this respect. At least several flock owners, of whose losses, in this way, I have been informed. The barrenness of the full blooded Tunis ewes, of the fifth or sixth descent, was also remarkable. But in the crosses this was not perceived. The crosses, bred back, were always fine and superior sheep; and are yet so.

I know that intelligent breeders hold contrary opinions. Yet wishing, anxiously, for the prosperity of their flocks; I humbly think, that it would be best for them not to disregard *any* well attested warnings. Let them continue their in and in system, on their own judgment; which *may* be best. But let them also cross; lest, perchance, they may, in the end, find themselves mistaken. It can do no harm, to multiply their chances; or,—in trite phraseology,—have two strings to their bow.—Many of them cross from necessity; or fortuitously. But let them do it systemmatically; i. e. cross, and breed back,—to fifteen sixteenths. They will find (as I presume, from some experience, to fortell) such to be the best sheep in their flocks. Yours, &c. RICHARD PETERS.

DR. JAMES MEASE, *Sec'ry Philad. Agric. soc.*

FROM THE NATIONAL INTELLIGENCER.

THE BEE WORM.

An insect thus called has been making very destructive ravages among the bees in Virginia, and in other parts of the country, by destroying them in the hive, and thus cutting off the supply of honey and wax, so comfortable and almost necessary in rural life. A friend, who takes great interest in whatever is connected with rural economy, has furnished us with the following recipie for preventing the destructive incursions of this enemy of the bee:

"Take two boards, of an inch thickness each, perforate the one in fifteen or twenty places with a half inch auger, place this board upon the other, mark the places opposite to these holes when laid on the other board—then bore this marked board one third through, on the upper side, in the marked places with a two inch auger, then place the board containing the small holes, on top of the other, and put the hive upon them.—The miller, or bee-worm, when he enters the hive, seeks a place, to be uninterruped by the bees, to deposit his eggs; the cavity formed as above affords a convenient place; the boards are to be removed two or three times a week, and the eggs brushed from the holes. This course will prevent the ravages of the bee-worm; for it is produced from these eggs."

FROM THE NEW YORK COMMERCIAL ADVERTISER.

HORTICULTURE.

We have just seen at the seed store of Mr. Grant Thorburn, a new variety of that excellent, and among New England men, universally popular fruit, the pumpkin. It is the Chilian pumpkin, raised by Mr. D. Judson, of Fairfield, (Connecticutt) from seed brought by a sailor from the interior of Chili. Its form is that of a musk-melon, of a dark colour, and rough exterior. It is two feet and two inches long, nine inches and a half in diameter, and weighs 24 lbs. and 12 oz. Mr. Judson has also furnished Mr. Thornburn with an ear of Chili corn, raised by him during the present season. The ear is of fair size; the kernels close set, white and highly glazed; and what is remarkable, five ears were generally set upon a single stalk. Its cultivation requires strong and rich land, and thorough tillage. The stalk is very large and the settings high on the stalk. These articles being new varieties, are worthy the attention of the agricultural community.

COWS.

The marks of a good cow are these: The forehead broad, the eyes black, the horns large and clean, the neck long and strait, the belly large and deep, the thighs thick, the legs round with short joints, and the feet broad and thick.

Red cows are said to give the best milk, though the black ones are said to bring the best calves, which is, however, doubtful. But the cow that gives milk the longest time, between the periods of

calving, is generally best for profit or for family use; provided, the quantity and quality of her milk be equal to that of others. Just before calving, a cow should be well fed; and if she calves in winter, her drink should be a little warmed for a day and night afterwards. If she does not clean well, after calving, give her a pail full of warm water, with some ashes in it. Those that calve pretty early will yield most milk in the season.

The times for milking ought to be regular, and as nearly equidistant as possible. Where the feeding is full, it is found that milking three times a day, during the summer season particularly, will increase the quantity nearly one third. In that case, the first milking ought to be by sunrise, the second about one, and the latter about seven oclock in the evening. Omitting to milk cows regularly, at least twice a day, tends very much to dry them. Sometimes one or more teats of a cow may be diseased; but this does not affect the milk of the rest.

Cows are certainly very profitable. Allowing one to give only six quarts a day for forty weeks in each year, and this is not a large allowance, her milk, at only two cents per quart, will amount to upwards of thirty three dollars; which is probably sufficient to purchase her and pay for a year's keeping.

Mr. M'Mahon recommends the following method for preserving cabbages for winter and spring use. Immediately previous to the setting in of a hard frost take up your cabbages and savoys, observing to do it in a dry day; turn their tops downward, and let them remain so for a few hours, to drain of any water that may be lodged between the leaves; then take choice of a ridge of dry earth in a well sheltered warm exposure, and plant them down to their heads therein, close to each other, having previously taken off some of their loose hanging leaves. Immediately erect over them a low temporary shed, of any kind, that will keep them perfectly clear from wet, which is to be open at both ends to admit a current of air in dry weather. These ends are to be closed with straw when the weather is very severe. In this state your cabbages will keep in a high state of preservation till spring; for being kept perfectly free from the wet and from the action of the sun, the frost will have little or no effect upon them. In such a place the heads may be cut off as wanted, and if frozen, soak them in spring, well, or pump water, for a few hours previous to their being cooked, which will dissolve the frost and extract any disagreeable taste occasioned thereby.

VEGETABLE CHIMNEY ORNAMENTS.

In winter, an elegant chimney ornament may be formed by cutting the head or thick end of a carrot, containing the bud, and placing it in a shallow vessel with water. Young and delicate leaves unfold themselves, forming a radiated tuft of a very handsome appearance, and heightened by contrast with the season of the year.

FOM THE INDIANAPOLIS GAZETTE.

SOMETHING FOR ANATOMISTS.

Not long ago an ox belonging to Mr. Custis Mallary, of Hamilton county, (Indiana) died of what is called the bloody murrain. A neighbour expressed a belief that there were *leeches* in the *liver* of the ox; to test which he was opened in the presence of Dr. Palmer, Mr. Potts, Mr. Miner, Mr. Mallary and several others. The liver being examined on the outside, a black spot was discovered, in which they made an incision, and took out a large leech—and on a thorough examination, three others were found, all perfectly secured within the liver; alive and enjoying excellent health and provision. Traces of their courses through the liver, in various directions were plainly seen. Now the question is, how came they there? Were they swallowed by the ox? and did they afterwards *find a passage* or *make* one to the liver? I am told they are often to be found in the liver of deer.

This circumstance reminds me of a statement I once saw in an old Philadelphia or Wilmington Magazine, made by Dr. Matthew Wilson, of the state of Delaware, one of the most eminent physicians of his day in that state, one of the best men perhaps in the world, and father to James Wilson, D. D. who is now pastor of the first Presbyterian church in the city of Philadelphia—which statement, attested by many persons of the first respectability in Sussex county, in substance, as well as I can recollect, was as follows: There was an opinion entertained by many, that dogs in the habit of killing snakes, or that had been snake bit, would have little snakes on their liver. Some one's curiosity led him to examine the liver of an old snake killing dog that died—and being satisfied that the prevalent opinion was correct, he proclaimed it to the neighborhood—and he being a man of veracity, his statement greatly excited the curiosity of all, and made the most incredulous doubtful, for he declared he *saw a number of little snakes adhering to the liver by their mouths.* In order to put the thing beyond a doubt, it was proposed to kill an old dog belonging to one of the neighbours, that had many years waged war with the creeping nation, never having been known to give or ask quarter; and for the sake of a fair and open examination, in the presence of all who might have curiosity to witness the scene, a general notice was given, and a great many persons attended. The poor dog was formally killed and opened by skilful surgeons, and his liver exposed to the view of all around: and the Doctor observes, that there were *a great number of perfect little snakes adhering to the liver by their mouths*—some of almost every kind of snake that was common in the country. He acknowledges himself perfectly at a loss to determine how they got there; whether they were generated from the bite by the poison, and *produced* by the liver—or had been swallowed by the dog and had found some passage afterwards, (which he thought almost impossible) to the liver—he would not hazard an opinion; but one thing was certain, they were on the liver fastened by their mouths when the dog was opened, and on being broke loose would run away.

FROM THE PLOUGH BOY.

FATTING CATTLE.

Mr. Homespun—I have lately read an essay of Mr. Laneon, of Connecticut, on what he deems the cheapest method of preparing cattle for the stall, the substance of which is here given.

In the winter of 1817, Mr. L. fatted an ox and a heifer, in a way that he found cheaper than the common keeping. He fatted the heifer first. Her food for the purpose was chopped straw, scalded and seasoned with salt, to which was added a little meal of Indian corn and oats, and a small allowance of oil cake, or boiled flax seed —the whole mixed up so as to form a mush. Of this about three pecks were given at a time. In fatting the heifer, she only eat a bushel of boiled flax seed. Some boiled hay was also given her. The ox was afterwads fatted in pretty much the same manner, as nearly as we are able to understand the reports of the two cases; for Mr. L. appears to have been more of the adept in fatting, than in describing the manner with clearness and precision. According to this account, however, it appears that his profits in pursuing this mode were very uncommon, and he says that the fatting of these cattle afforded him more clear profit than he had derived from all the cattle he had ever before fatted. It would seem, indeed, that he considerably more than doubled the price of his cattle in fatting them, and that the expense was very inconsiderable.

This being the usual time for commencing the business of fatting for the winter stores, I have thought proper to exhibit the plan of Mr. L. from a belief, that it is excellently adapted for fatting cattle with the least expense. It will readily be perceived, however, that the fall pasture is calculated to obviate the expense of using boiled hay; but I have no doubt that when good hay is steam boiled, which may be done with a little expense, it is just as nutritious for cattle as when in its green state.

A Plough Boy.

LIST OF COUNTERFEIT NOTES,

Now in circulation; by reference to which, retail merchants and others, may save themselves from considerable loss. Issued from Armstrong's State Lottery and Exchange office, South West corner of Market and South streets, Baltimore.

Canada—Montreal Bank $10, payable to B. Holmes, J. Gray, president, R. Griffin, cashier; well imitated.

New Humshire—Franklin Bank of the city of Portsmouth, five dolls. Concord, N. H. Bank, 2.

Connecticut—Eagle Bank of New Haven, 5, letter J, June 1, 1820: well imitated. Eagle Bank of New Haven, 3, letter C, dated Dec. 1, 1818: engraving very bad. Hartford Bank 10, signed Nathaniel Terry, president, and Horace Harr, cashier, dated August 1, 1819, and January 1, 1824. Phœnix Bank of Hartford, 10, papable to E. Terry, dated Jan. 1, 1824, letter B, signed George Beach, cashier, Chas. Singourney, president. Phœnix

Bank, 1, signed George Beach, cashier, Chas. Singourney, president: engraving and writing generally stiff and bad. Hartford Bank, 3, letter B, payable to H. Hendrick, dated July 1, 1823, extremely well executed.

New York—Phœnix Bank, Litchfield Branch, 3, dated August 1, 1819: engraving bad and not of the circular die work. Manhatten Bank, 5, letter G, of date June 1, 1823, payable to J. Rutgers: tolerable imitation. Manhatten Bank 1 dollar notes. Franklin Bank, 5, letter, C, payable to Wm. Underhill, dated November 25, 1823: good imitation. Also 1 dollar notes. Franklin Bank, 3, letter D, payable to Daniel Burlas: H. Post, Jr. cashier, Daniel Liggeld, president; filling up and signatures of a glossy yellow cast. Ontario Bank, 5, letter F, payable to F. Chapin, dated Canandaigua, signed M. W. Gibson, cashier, N. Goscham, president, February 1, 1810: engraving bad—paper of a blue cast. Phœnix Bank New York, 10, letter B, payable to G. Willis, June 1, 1824: not of the circular die work. Bank of Chenango, 3, letter D, payable to Truman Enos, dated September 4, 1821. Bank of Troy, 2; letter A, payable at the Branch at Waterford, dated September 6, 1823. Bank of Utica, 10, letter A, dated July 1, 1819, R. Huntington, president, payable to R. Brent, well executed. Central Bank, Cherry Valley, 1: filling up and signatures very bad. Bank of America—notes of $5 purporting to be of this bank but signed by E. Dudley, president, and Jas. Clery or Clary, cash. payable to S. Howe, dated May 1, 1824, letter A. Mechanics' Bank N. Y. 1 dollar notes. Bank of Geneva, $2, Oct. 1818, J. Rees, cashier, H. Aweight, president—Also 1 and 3's same bank. Franklin Bank of N. York, 5, favor of R. King, dated January 1, 1824, signed H. Post, jr. cashier, Samuel Leggeld, president: Franklin head badly executed. Bank of Newburg, 5, payable to N. Patterson, dated August 4, 1815, letter G. signed J. S. Hunn, cashier, J. Bolt Knapp, prest. Merchants' Bank of New York, 2, dated Sept. 4, 1824, signed G. P. Vroon, cashr. G. Watson, prest. letter A. New Haven Bank $10, payable to J. Street, at the city Bank in the city of New York, letter C, September 1820—H. R. Pyncher, Cashier, A. Monson, Jr. President.

New Jersey—State Bank at Newark, 3, payable to James Bruen, at Mechanics' Bank of New York, letter F, filling up and impression heavy. Steam Mill Banking Company—altered from 1 to 10: coarse and badly made. The ornamental work round the denomination at top, is obliterated and a new one supplied. Commercial Bank, Perth Amboy, 3, good imitation. New Jersey Bank, Jersey City, 5. State Bank at Trenton, 1, May 27, 1823. State Bank at Trenton 2, letter D, filling up bad. Patterson Bank, 5, letter C. dated 1st May 1824: extremely well done. State Bank at Morrisville, 3, letter E. Ditto at New Brunswick 2, letter E. Ditto ditto 10, letter F. Jersey Bank, 5, signed S. St. John President, and J. Kissam, Cashier; payable to E. F. Boudinot, at the Ontario Bank: dated November 12, 1822—the paper bad, and of a more silky texture than the genuine. State Bank at Brunswick 5, payable to J. Bishop, letter D. dated Febuary 12, 1821, D. U. Disborough, Cashier, John Bray, President: engraving bad. Sus-

sex Bank, 3, letter D, payable to D. Ford, dated Newton, March 1, 1822; S. D. Morford, Cashier; E. Grapine, President: paper silky and thin. State Bank at Camden, near Philadelphia, 5, payable to A. Gold, dated March 4, 1821: Signed Wm. Hilligas, Cashier, Richard M. Cooper, President: vignette badly executed. Farmers' bank of New Jersey, $1 notes altered to 20; alteration not well but the note being genuine, requires some attention.

Pennsylvania—United States Bank, Philadelphia, 5, letter A, Philadelphia Bank, 10, letter C. Easton Bank of Pennsylvania, 10, letter C, dated February 1, 1824: engraving bad. Bucks county Farmers' Bank 10, letter A, payable to F. Pincon, dated Hulmeville, February 6, 1815; George Harrison, Cashier, and Hulme, President. Farmers' and Mechanics' Bank, Philadelphia, 50, letter B. Gettysburg Bank, 5, letter D, signatures bad; vignette heavy. Stephen Girard, Philadelphia, 5, letter C. November 3, 1820; engraving and filling up tolerably good, but not of the circular die work. Bank of Pennsylvania, Philadelphia, 5, letter C, not circular die work. Philadelphia Bank, 5; Q, Campbell, Cashier, J. Reed, President; favor of V. Weir, dated January 4, 1824—letter E, filling up bad. Bridgeport Manufacturing Company, 1, payable to Peter Snipe—Robert Funk, Cashier, Wm. Spicer, President, Feb. 1st, badly executed.

Delaware—Delaware Bank 5, letters U, and V. Farmers' Bank of Delaware 1, engraving bad. Bank of Delaware, at Wilmington, 5, payable to J. Erskine, paper white and thick—imitation of Murray, Draper, & Co. Wilmington and Brandywine Bank, 20 signed Evan Thomas Cashier, John Forbeds, President, letter B, July 4, 1823.

Maryland—Elkton Bank of Maryland, 10, letter A, dated July 4, 1824; well executed. Commercial and Farmers' Bank of Baltimore, 5, note having been changed to 10; when examined very perceptible. Marine Bank of Balimore, 4, badly executed, signatures being very much cramped; discovered by a slight examination.

District of Columbia—Union Bank of Georgetown, 5, letter B, dated 20th December, 1815; D. English, Cashier, Abraham Bradley, President; impression heavy, and the whole badly done—Ditto do. 3, favor William Penn, dated 1st December, 1818. Bank of Potomac, 5 altered to 10. Corporation notes 1, require examination, a number of them having been changed to 2; the s added to the one dollar in the body of the note, being made with a pen is easily detected.

Virginia—Farmers' Bank of Alexandria, 5, letter B, payable to John Jay; dated November 5, 1821, R. M. Scott, President, filling up bad, and impression heavy and spread. Bank of Alexandria, 5, changed to 10. Farmers' Bank of Virginia, 100, letter A, dated April 2, 1818, payable at the Office of Discount and Deposit, Lynchburg, to William Radford; die work rather irregular, otherwise well done.

North Carolina—Bank of Cape Fear, 3, dated 5th January, 1818; payable to Samuel Craig, James Pouts, or Potts, Cashier, John G. Williams, Prest. signatures engraved. State Bank of North Caro-

lina, 4, payable at the principal bank, Raleigh, to H. Collins, dated 5th November, 1814, signed W. H. Hayward, Cashier, and William Polk, President, letter C, well done. Ditto do. do. 20. State Bank, N. C. 81 bills changed to 2: the figure 2 rather imperfect and easily detected.

South Carolina—Union Bank of South Carolina; notes of 50, and in circulation, purporting to be of this bank—no bills of that denomination have ever been issued from this bank.

Georgia—Bank of Augusta 5, well executed.

GENERAL CENSUS OF THE WORLD.

The present census of the world is said to stand thus:—

Jews	4,000,000
Pagans	456,000,000
Mahomedans	140,000,000
Christians	200,000,000
Total	800,000,000

Deists and Atheists are comprehended, but not distinguished in either of these enumerations, as they do not avow themselves by any formation into bodies, but are anomalies in each class.

It is worthy of notice, that the most ancient congregation, viz. Pagans, still subsist through the globe, and comprise more than one half of its general population; that the second in order of time, viz. Jews, have, since the destruction of their temple and city, in A. D. 70, fallen so near to decay, as to comprise only a 200th part of the whole; that the third denomination, viz. Christians, now include one forth part of the whole; and that the Mahomedans, who sprang six centuries after the Christians, and threatened to annihilate them, occupy the space of one sixth part of the whole. It is also observable, that when an estimate of this kind was made about fifty years since, it was supposed that the Christians amounted to one sixth part, and now they have increased to one fourth.

A step further in this inquiry disposes of the Christians thus in their subdivisions:—

The Greek and Eastern Churches	30,000,000
Roman Catholics	100,000,000
Protestants, including all sects	70,000,000
Total	200,000,000

Those having all risen since the promoting of the Universal Christian Church, 4,000 years A. M. of which—

The Western and Eastern Churches began and united in the	6th century.
Their separation	9th do.
Mahomed	7th do.
Christianity in Great Britain	7th do.
Darkness of Mahomedanism	6th to 16th do.

Waldenses	12th do.
Wickliffe, Huss, and Jerome	13th to 15th do.
Luther and Calvin	16th do.
Reformation	16th do.
Remonstrants	17th do.
Protestant sects	17th & 18th do.

It is unnecessary to enlarge this scale; the object is thus answered by shewing the divisions of people, and their denominations and dates, by which any person conversant in such researches will find occupation enough for his reflection upon the probable state of mankind during the *ensuing half* century, under the advantages of an unexampled improvement in every country and condition, both in arts, navigation and commerce, domestic and universal; an enriched acquisition of every embellishment of intellect, literature, and the fine arts; chemistry and religious learning; an enlarged and liberal toleration in church and state; a diffusion most unparalleled of the Holy Scriptures, of education, and a general intercourse among all nations.

Electric Eel.—The Editor of the Hartford *Times*, mentions the arrival in that city of a *living* Electric Eel, supposed to be the first ever brought to the United States. It was conveyed thither by Capt. Latimore, from Surrinam; is about three feet in length, and resembles a Lamprey-Eel. It has but one fin which runs nearly the whole length of the body, and serves for a rudder. In order to try the effect of a shock on a fish, one was put in the tub which contained the Eel; on its coming in contact, it was thrown up about two feet, and when it fell was perfectly lifeless. The editor of the Times, while examing this singular animal, says that he received three or four severe shocks on touching it.

FROM THE CAYUGA PATRIOT.

LONGEVITY OF A HORSE.

Died in the town of Sempronius, on the 20th of January, a Horse, aged *thirty-five* years and two months. The horse has been owned by one man thirty-four years; he has ever been a faithful servant to his master, and never failed to perform any reasonable task put upon him until about one month previous to his death, at which time he was taken with a disease of which he died.

FROM THE NEW HAMSHIRE PATRIOT.

WOOL.

The most profitable occupation for our yeomanry owning highland farms is the rearing of Merino Sheep. Full blood Merino breeders are worth on an average from 10 to 12 dollars a head—full blood merino wool washed, sells to the manufacturers at from fifty to sixty cents per pound. We miss the butter and cheese from some of the

farmers on Connecticut river, (and they brought us the very best of those articles)—and see them frequently pass us on their way to market with loads of wool. A few towns on Connecticut river will sell the present year from 50,000, to 100,000 dollars worth of wool. The rearing of merino sheep and the production of wool, is a business that cannot be overdone, any more than the culture of cotton in the southern states; and, if we do not greatly err, it will be a business which will yield ready money and wealth, not less to the farmer of the north than the cotton business does to the planter of the south.

FROM THE AMERICAN FARMER.

METEOROLOGY.

As in our very dry seasons, the most of your readers are watching the winds and the signs, as they are termed, for rain. I have thought the following translation from a French work, called "Erreurs et Prejuges," might be acceptable to them.

"The Abbe Toaldo having demonstrated that in 1106 new moons 950 have been followed by remarkable changes of weather. There are then 950 chances to 156, or what is the same thing, six to one that a new moon will produce a change of weather. The other phases have less influence. The full moon but five chances to one. The first and last quarters give but two and a half to one."

TRUTH AND YOUNG ROMANCE.

A SONG.

YOUNG Romance through roses straying,
Saw old Truth trudge lamely on;
One in pleasure's light was playing,
The *other* sighed for pleasures gone:
Cries Romance, "O rest a minute,
And discuss our views of Earth:—
Yours may have most prudence in it,
But in *mine* is all the mirth."

"Ah!" said Truth, "this world discloses
Nought but vain delusive wiles,
Thorns are under all your roses,
Sadness follows all your smiles:"
—Cries Romance, "Perhaps I often
Colour life with tints too warm;
Yet *my warmth* a *shade* may soften,
While *your coldness* chills a charm."

"What is Love?" the sage then asks him—
"Love—in summer hours so sweet?
Winter weather soon unmasks him,
And your idol proves a cheat!"

"Love!" the youth replies, "O sever
Real love from vain deceits;
Constant love brings hours that never
Lose their sunshine or their sweets."

"*Friendship*, too, you call a treasure,
But," says Truth, "it is a tie
Loosely worn 'mid scenes of pleasure,
And when fortune frowns—thrown by."
"Friendship," he replies, "possesses
Worth which no dark change destroys;
Seeking, soothing our distresses,
Sharing, doubling all our joys."

"Go," says Truth, "'tis plain we never
Can such hostile thoughts combine;
Folly is your guide for ever,
While dull sense must still be mine."
Cries the boy—"Frown on, no matter,
Mortals love my merry glance;
E'en in Truth's own paths they scatter
Roses snatch'd from Young Romance."

FROM POULSON'S AMERICAN DAILY ADVERTISER.

TO THE COMET.

CELESTIAL visitant! say whence
On fervid wheels, amid the expanse
Of heaven's ethereal vault serene
Thy mystic course, thro' time has been?

Art thou a Herald to proclaim
Thy great Creator's power and name?
Thy path way in the azure sky,
Declares his wonderous majesty.

Ah yes! for he whose skill divine
Causes the glow-worm's lamp to shine,
Directs thee amidst worlds unknown
The pageant of his starry throne.

In vain Philosophy aspires
To trace thy flight, and gleaming fires!
Can mortal man unfold the scheme
Of Heaven's architect supreme?

Bright Orb of Light! 'tis ours to see
The great Creator's power in thee!
To tell, to distant worlds, is thine,
"The hand that made *me* is divine."

October, 1825.